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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,339

03/10/2005

Bernd Schafer

3967 0164US

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07/26/2006

DREISS, FUHLENDORF, STEIMLE & BECKER
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D-70032 STUTTGART,
GERMANY

EXAMINER

GEORGE, TARA R

ART UNIT

PAPER NUMBER

3733

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,339

Applicant(s)

SCHAFER, BERND

Examiner

Tara R. George

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10 March 2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Drawings

The informal drawings are not of sufficient quality to permit examination as they are photographs and are difficult to understand. For example, the specific features of the flutings in figure 2 are difficult to see. Therefore, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

Specification

The disclosure is objected to because of the following informalities: each section of the specification should be preceded by their respective headings. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

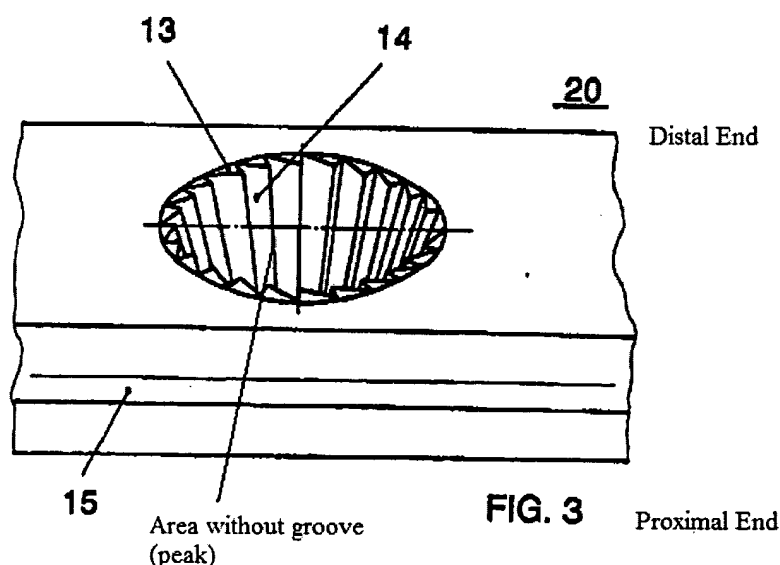
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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1. Claims 10-14, 17-19 and 21 are rejected under 35 U. S. C. 35 102 (b) as being anticipated by Gogolewski et al. (US Pat. 5,275,601).

Gogolewski discloses a system including a vertebra plate 20, two openings 13 (see Figure 2) and a first fluting 14 (note the increasing fluting depth as shown in Figure 3 below). The system further includes a bone screw 10 having a screw head 3 and a threaded screw shank 1. The bone screw 10 also includes a second fluting 4 (note the varying depth along a length, as shown in Figure 1 b and 1 c, which also increases from each pole to the equator of the head). The openings 13 widen in a distal direction and can widen in a conical or dome-shaped fashion (see column 5 line 39). The first and second flutings 14 and 4 extend in a longitudinal direction and are wedge shaped wherein individual grooves are separated from each other (see column 6 lines 60-64, and column 2 lines 42-45). The flutings 14 and 4 further include areas without grooves disposed between the grooves (i.e. peak), and are structured and dimensioned to cooperate with one another (column 6 lines 60-64).



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gogolewski et al. (US Pat. 5,275,601) in view of Steger et al (US Pat. 7,052,499).

Gogolewski et al. discloses the claimed invention except for the plate having four receiving openings located in corner areas of the plate. Steger et al. discloses that plates can be made with different shapes and forms depending on its intended use (see Figures 2, 11b, 19 etc.). It would have been obvious to one skilled in the art at the time the invention was made to construct the system of Gogolewski with the plate having four receiving openings located in corner areas of the plate in view of Steger et al., in order to adapt the plate for implantation in a different part of the body.

3. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gogolewski et al. (US 5,275,601) in view of Steger et al. (US 7,052,499) as applied to claim 15 above, and further in view of Collins et al (US Pat. 6,613,053).

The combination of Gogolewski et al. and Steger et al. discloses the claimed invention except for the plate having a receiving opening disposed in a center of the plate. Collins et al. teaches to provide a bone plate with a receiving opening

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disposed in the center of the plate (see column 1, lines 65-66). The purpose of the opening is to allow attachment of the bone graft to aid fusion (see column 1 line 66). It would have been obvious to one skilled in the art at the time the invention was made to construct the system of the combination of Gogolewski et al. as modified by Steger et al. with the plate having an opening disposed in the center of the plate in view of Collins et al., in order to allow attachment of the graft to aid fusion.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gogolewski et al. (US Pat. 5,275,601).

Gogolewski discloses the claimed invention except for the length of the area without grooves being between 0.3-2.0 or between 0.5-1.0 times a length of the groove. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the system of Gogolewski with the length of the area without a groove being 0.3-2.0 or 0.5-1.0 times the length of the groove, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for art of cited interest.

Any inquiry concerning this communication should be directed to Tara George whose telephone number is 571-272-3042. The examiner can normally be reached on

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M-F 8am-5pm. If attempts to reach the examiner by telephone are unsuccessful. The examiner's supervisor, Eduardo Robert, can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRG



EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER